DOCUMENT RESUME

ED 380 529 UD 030 339

TITLE Center Seeks To Improve Education for Disadvantaged

Students.

INSTITUTION Center for Research on Effective Schooling for

Disadvantaged Students, Baltimore, MD.

PUB DATE Apr 90 NOTE 14p.

PUB TYPE Collected Works - Serials (022) -- Reports -

Evaluative/Feasibility (142)

JOURNAL CIT CDS Report; Apr 1990

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Achievement Gains; Bilingual Education; *Cooperative

Learning; *Disadvantaged Youth; Educational Change;

*Educational Research; Elementary Secondary

Education; Ethnic Groups; Minority Groups; *Reading

Achievement; Research Utilization; *Track System

(Esucation)

IDENTIFIERS *Center for Res Effective Secondary Disadvant Stu;

Language Minorities; *Success for All Program;

Texas

ABSTRACT

This collection of descriptions of research at the Center for Research on Effective Schooling for Disadvantaged Students opens with "Center Seeks To Improve Education for Disadvantaged Students," a discussion of the mission of the Center to improve schooling for the disadvantaged through new knowledge and practices produced by rigorous scientific study and evaluation. Projects are outlined in the fields of early education, elementary education, and middle school and high school grades. "Tracking: Obsolete System Still Dominates School Organization" reviews recent research on tracking and ability grouping that shows disturbing trends in tracking and adverse effects on various minority and ethnic populations. "Second Year 'Success for All' Shows Large Reading Gains" follows the impressive reading achievement gains provided for disadvantaged students by the Success for All program at an elementary school in Baltimore (Maryland). "Success for All: The Research-Based Program Elements" provides additional details about the successful program. "Cooperative Learning for Language Minority Students" describes a bilingual program in Texas. "Racing against Catastrophe" reviews perspectives on disadvantaged students and school restructuring. (SLD)

* Reproductions supplied by EDRS are the best *hat can be made *

* from the o.iginal document. *

Center Seeks To Improve Education for Disadvantaged Students

CDS Report

April 1990

U.S. DEPARTMENT OF EDUCATION

- EDUCATIONAL RESOURCES INFORMATION CENTER ERIC.

 CET This department has been rependured in a special from the person or organization evigenation in
- Minor changes have been made to improve reproduction an dity.
- Fonts of view or opinions stated in the designent denot recessarily represent the or OERI productive a pages.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

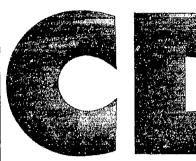
ctiva Schar di TO THE EDUCATIONAL RESOURCES INFORMATION GENTER (ERIC)

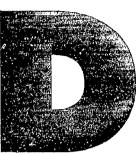
2

BEST COPY AVAILABLE



CENTER FOR RESEARCH ON EFFECTIVE SCHOOLING FOR DISADVANTAGED STUDENTS







THE JOHNS HOPKINS UNIVERSITY

APRIL 1990

Center Seeks To Improve Education for Disadvantaged Students

The Center for Research on Effective Schooling for Disadvantaged Students (CDS) has been established at the Johns Hopkins University as a national research center funded by the Office of Educational Research and Improvement. The CDS mission is to significantly improve the education of disadvantaged students at each level of schooling through new knowledge and practices produced by rigorous scientific study and evaluation.

"Scientific study and evaluation can provide a major basis for creating more effective schools for disadvantaged students—those who traditionally have been underserved by our schools," according to Jomills Henry Braddock II, Director of the Center.

Center programs use scientific designs, measures, and methods to clearly test the impact of new educational approaches and provide empirical evidence on how to improve the education of disadvantaged students under different school conditions.

CDS is conducting a concerted effort to identify and develop effective programs and practices that meet the needs of disadvantaged children at all

educational levels, from preschool through high school. The effort incorporates special attention to the needs of language minority children and special attention to the roles of families and communities.

Early Education

The development of language use and comprehension in the early years forms the base for future learning and development as a student and as a person capable of understanding the world.

Research has shown the value of preschool and the value of developmentally appropriate curricula. The goal should be preschool and kindergarten for all educationally disadvantaged children, but our preschools and kindergartens must focus on developmentally appropriate curricula that build strong language acquisition.

Thus CDS is working to develop such curricula and identify existing curricula that meet this goal.

Elementary Education

We need to improve the elementary school education of disadvantaged

children. A large number of our children enter middle and junior high school without the reading and comprehension capabilities needed to succeed. An equally large number enter middle and junior high school capable of doing math computations but incapable of applying problem-solving skills.

These abilities — reading and problem-solving — are the business of our elementary schools. For our disadvantaged and at-risk children, the elementary schools must provide a strong base in reading and problem-solving.

Research tells us that there are effective elementary school programs and practices for disadvantaged children. CDS is expanding that research and applying it in an urban elementary school restructuring program that voices a strong commitment — by the end of third grade, all children will be at or above grade level in reading, writing, and mathematics. The second-year evaluation of this program — Success for All — is reported in this issue of the CDS Report.

Other projects at the elementary school level are seeking to identify and develop effective tutoring programs, alternatives to repetition and retention in the early grades, and effective summer school models. Also, schoolwide

INSIDE THIS ISSUE

Effects of Tracking3
Success for All5
Cooperative Learning for Language Minorities 9
Racing Against Catastrophe10

programs being implemented under revised Chapter 1 regulations are being examined for effects on the learning and development of disadvantaged student populations.

Middle School Grades

We've taken a giant step toward more effective schooling for our disadvantaged children with the advent of the middle school — but only if we demand that middle schools take seriously the need to adapt their structures and activities to actually meet the unique needs of the early adolescents that they serve.

CDS is working toward the "student-centered" middle school—middle schools whose organization and instructional practices accomplish two essential elements—the strong academic preparation of students for their high school studies and the personal development of students toward independent and responsible young adulthood.

CDS work in middle schools is seeking to develop and implement effective programs that disadvantaged students will find relevant and even exciting, and which will give them the reading and comprehension skills that will help them escape the cycle of failure.

CDS is working to develop and evaluate the following elements for inclusion in middle school practice.

- 1) Interdisciplinary teams of teachers and a specific adult advisor for every student, to provide a positive human climate in the middle school.
- 2) Revised curricula in reading and mathematics that encourage more active participation by students in their own learning and are based on materi-

als appropriate to adolescents' interests.

- Alternatives to failure and nonpromotion that provide immediate help to students who need it.
- Improved evaluation procedures that recognize student progress or improvement while maintaining high overall standards.

This is the CDS vision of the student-centered middle school. And the structures and practices that create such schools are within our reach. Some exist already in exemplary middle schools, some need to be developed from the research base. We need to put them together, we need to evaluate them thoroughly to be sure of the effects, we need to implement them nationwide; then our middle schools can become a real part of the solution to more effective education for disadvantaged students.

High School Grades

Changes can be made in high schools to make them more effective environments for disadvantaged students.

We can identify and develop alternatives to tracking, that great sorting mechanism that keeps disadvantaged students at the lower levels of our system. (See article in this issue.) We can find alternatives to retention, that overly prevalent school practice that pushes disadvantaged students into dropping out.

We can identify and develop the mechanisms that improve the transition of our high school students from education to work — the processes by which we can insure that our "forgotten half" of students enter the world of employment in career-oriented work, whether that work be with the hands or with the mind or with both.

The CDS vision is that we can find these alternatives and these more effective practices, and we can prove that they are better than the things we are now doing, and high schools nationwide will become more effective places for not only our disadvantaged students but for all students.

More To Do

There are two other important areas of CDS work. First, the needs of language minority children and the needs of American Indians deserve special attention. CDS programs are researching and developing adaptations of cooperative learning for use in schools to improve the academic and affective outcomes for these populations, and developing and evaluating a community-based program to promote the literacy of Hispanic adults and children.

"The CDS vision is that we can find these alternatives and these more effective practices, and we can prove that they are better than the things we are now doing, and high schools nationwide will become more effective places for not only our disadvantaged students but for all students."

ຳ

A separate article in this issue describes the early work in implementing cooperative learning processes in schools in El Paso, Texas. This work is being carried out by researchers at the University of Santa Barbara in California. Work on using cooperative learning instructional processes in Indian education is being conducted by Northern Arizona University.

Second, although the nation's schools are the focal point for improving education for disadvantaged students, much more can be accomplished if we can harness the power of the family and the community into pulling toward the same goal.

In the past few years, parents and communities have increasingly come to recognize the need for their involvement and their cooperation. The job now is to create and develop and implement the school-family-community collaborative efforts that will actually make a decisive difference in the education of our disadvantaged students. At CDS, we think schools can do much more to initiate and evaluate these collaborations, prove their worth, and provide exemplary

"We need to apply science to the improvement of education for disadvantaged students. Careful and rigorous scientific evaluation of educational practices and programs will tell us what works."

models to vastly strengthen schoolfamily-community connections nationwide.

Some Guiding Principles

The time is appropriate for solutions. Much knowledge exists, some exciting programs exist, the components for building more effective programs and practices exist, and research bases exist from which effective programs and practices can be built

We need to work at all levels of schooling because we have ineffective education for disadvantaged students at all levels of schooling, and improvement in most cases occurs at the school building level.

We need to apply science to the improvement of education for disadvantaged students. Careful and rigorous scientific evaluation of educational practices and programs will tell us what works. When we know what works, we can confidently move to the national implementation of what works by collaborating with local schools and districts nationwide on the process of adopting and adapting to meet regional and local needs.

Implicit in these guiding principles is the need for collaboration among researchers, school and district practitioners, families, communities, federal, state, and local policy makers, and education interest groups.

Tracking: Obsolete System Still Dominates School Organization

"There may have been a time when curriculum tracking in schools did actually coincide with the needs of the society and the economy outside of schools — that is, a number of academically proficient students were needed to pursue further education and careers that depended upon that education, while a number of non-academically oriented students were needed to enter the workforce directly and perform the important and even

well- paying jobs that required less education.

"This situation has changed dramatically, but curriculum tracking still exists."

This condemnation of tracking in schools as an obsolete organization is voiced by CDS researcher Jomills Henry Braddock 11, based on his research on tracking and ability grouping

in American schools. Braddock's findings show disturbing trends and effects for various student populations, including African American, Hispanic, American Indian, Asian American, and even majority white students.

The research examines ten-year trends in tracking, the current status of tracking and ability grouping, and the effects of track placement on young adult literacy.

"...placement in the higher academic track as opposed to placement in the lower general and vocational tracks has substantial positive effects on prose, document, and computational literacy for young adults, while placement in general and vocational tracks has substantial negative effects on these literacy measures."

Ten-Year Trends

The study compares high school curriculum tracking for African American, Hispanic, and white students from 1972 to 1982, using High School and Beyond (HSB) data and National Longitudinal Study of the High School Class of 1972 (NLS) data.

The major trend over the 1972-82 period for both African American and Hispanic students was to continue, compared to whites, to be underrepresented in academic tracks and over-represented in vocational tracks. Compared to whites, they did make some gains in representation in the academic track — but these gains were due mainly to a decrease in white students in the academic track (from 52.5 percent in 1972 to 40.9 percent in 1982).

Braddock summarizes: "... movement toward parity with white students by African American and Hispanic students from 1972 to 1982 does not reflect that more of these students moved into the academic track in that ten-year period; it mostly reflects the fact that white students shifted in substantial numbers from academic tracks to general and especially vocational tracks from 1972 to 1982."

The study also examined the 1982 data to compare the status of tracking for American Indian and Asian students. Compared to white students,

American Indian students were in the academic track at a 54 percent lower rate and were in the general track at a 62 percent higher rate. Asian students were in the academic track at a 42 percent higher rate than whites and were in the general track at a 26 percent lower rate.

Ability-Grouped Class Assignment and Curriculum Tracking

Between-class ability grouping begins in the elementary grades. By grade seven, Braddock finds, about two-thirds of all schools that include grade seven report using at least some between-class ability grouping — and 20 percent of these schools report that all of their seventh grade classes are ability-grouped. This practice of ability grouping for all subjects is more prevalent in schools that have sizable (more than 20 percent) enrollments of African American and Hispanic students.

At the high school level, tracking is double trouble — students are not only relegated into general, vocational, and academic tracks, they are further grouped by ability into separate classrooms within those tracks. At this level, Braddock finds a litany of negative outcomes for race-ethnic groups.

 African American students in the academic track compared to white students are underrepresented in the top math/science classes (34 percent vs 39 percent), English classes (30 vs 36 percent), and social studies classes (37 vs 43 percent). They are overly placed in remedial English and remedial mathematics.

- American Indian students are significantly overrepresented in remedial English and remedial mathematics.
- Hispanic students are significantly overrepresented in remedial English, remedial mathematics, and special education courses.
- Asian American students are the exception. They are significantly overrepresented in honors mathematics, and are not overrepresented in remedial or special education courses.

Tracking Effects on Literacy

"Young adult literacy is strongly affected by high school curriculum track placements," Braddock notes.

He analyzes the effects of track placement for the race-ethnic subgroups on three dimensions of adult literacy as defined by the National Assessment of Educational Progress (NAEP) - prose literacy, document literacy, and computational literacy. The findings "show clearly that placement in the higher academic track as opposed to placement in the lower general and vocational tracks has substantial positive effects on prose, document, and computational literacy for young adults, while placement in general and vocational tracks has substantial negative effects on these literacy measures."

Braddock notes that, "... these effects remain after we control for educational attainment and social

background." Thus "tracking itself, over and above other factors, is responsible for a significant portion of the disparate outcomes."

Time for Change

Braddock's research shows that curriculum tracking is an anachronistic organizational structure that may have once served a practical purpose but no longer docs. The effects of tracking are especially negative for African American, Hispanic, and American Indian subgroups.

The plight of American Indians is "no new concern," Braddock notes. "The historic ineffectiveness of American schooling for this disadvantaged population is well documented."

Tracking is part of that ineffectiveness.

Braddock notes that African American and Hispanic subgroups "constitute our largest minority populations and the future economic health of the country depends upon their access to a high quality education." Tracking does not provide this access.

The general success of Asian American students in curriculum-tracked schools is not entirely positive. The national media report, Braddock notes, that their success "...is creating social backlash against this population and bodes ill for the successful integration of Asian American children into the fabric of American society."

At the same time, their general success "obscures the fact that some Asian American subgroups are as educationally disadvantaged as the African American, Hispanic, and American Indian subgroups."

Finally, Braddock's analysis of trends over ten years found a large decrease of white students in the academic track with corresponding increases in general and vocational tracks. This shift, he notes, "...could easily be viewed as a major shift from being advantaged to being less advantaged or even disadvantaged in terms of educational opportunities to learn."

Reference

Braddock, Jomills H. II. Tracking: Implications for Student Race-Ethnic Subgroups. Baltimore MD: The Johns Hopkins University, Center for Research on Effective Schooling for Disadvantaged Students, Report No.1, February 1990. (\$4.50).

Second Year "Success for All" Shows Large Reading Gains

In its second year of implementation in Abbottston Elementary School in Baltimore City, the Success for All school restructuring program continues to rack up impressive reading gains by disadvantaged students in first-through fourth-grade.

Lowest-achieving first-graders — the 25 percent who scored in the

bottom quartile of their class on pretests — show the most impressive and exciting advances. Two years of Success for All has them reading at a 1.8 grade equivalent — almost grade level.

They far outscore their matched control school counterparts on individually administered reading tests,

"Lowest-achieving first-graders — the 25 percent who scored in the bottom quartile of their class on pretests — show the most impressive and exciting advances. Two years of Success for All has them reading at a 1.8 grade equivalent—almost grade level."

with a mean (and almost unthinkable) effect size of +2.37. On average, they score at the 46th percentile on the reading tests, compared to average scores at the 8th percentile for matched low achievers in the comparison school.

Success for All at the disadvantaged inner-city elementary school is a collaborative effort of the Baltimore City Public Schools, the local Abell Foundation, and CDS.

The program restructures the urban elementary school with one commitment in mind: Do everything necessary to insure that all students will be performing at or above grade level in reading, writing, and mathematics at the end of third grade. The program

concentrates resources in grades pre-K to 3 and uses instructional programs based on the best available research.

The research-based school programs include one-on-one tutoring, regrouping for reading, a family-support team, frequent assessments of learning with immediate help on problems, use of an innovative beginning reading program and a Beyond the Basics reading program, and more.

The evaluation of second-year results was conducted by CDS researchers Robert Slavin, Nancy Madden, Nancy Karweit, Lawrence Dolan, and Barbara Wasik, using individually-administered standardized reading achievement tests and the group-administered California Achievement Test (CAT) given by the district.

Effects on Reading

Students at all grade levels outperformed students in a matched control school. Effect sizes for the differences in reading performance on the individual tests for first, second, third, and fourth grade Success for All students were +.76, +.28, +.38, and +.38, respectively. Effect sizes on the CAT favoring Success for All students were not significant in the first and second grade, but measured +.53 and +.73 for third and fourth graders, respectively.

"Effect sizes of more than .20 are generally considered to be educationally meaningful," the CDS researchers noted.

Effects on Retention

It's almost unfair to compare retentior as in Success for All schools with retention rates in control schools — one of the stated policies of Success for All is that retention will

be avoided as a way of responding to low student achievement.

It's the Success for All program elements that reduce retention, however. The reading program regroups students across grade levels, so students don't need to be retained if reading is their only shortcoming. Also, the strong tutorial support program attacks reading problems directly.

The effects on student retention are particularly strong at Abbottston. This school retained 34 students in grades K-5 in the year prior to beginning Success for All, retained eight students after the first year of use, and retained four students after the second year.

Over all the Success for All sites (see below), retention was reduced by an average of 24 percent after one year of the program. In matched control schools, the number of students retained increased by an average of 17 percent.

Effects on retention may be "... of great importance in assessing the cost effectiveness of Success for All over time," the researchers note, "but it would be inappropriate to extrapolate from one-year trends to make this assessment."

"There is clear evidence that the longer students are in the program, the better they do — the effects are cumulative." The ultimate goal of the Success for All program is to restructure the innercity elementary school so that all students who begin in pre-K are achieving at grade-level or above in basic skills (especially reading) by the end of third grade, and maintain those skills at grade-level through the end of elementary school. The accomplishment of this goal will be assessed by examining the progress of children who began pre-K at Abbottston in the 1987-88 school year, and who are thus now in first grade.

"The program is headed in the right direction," the researchers say. "There is clear evidence that the longer students are in the program, the better they do — the effects are cumulative. Also, the very positive effects seen in the third and fourth grades indicate that student success can be accelerated even further."

Further Research

Altogether, the CDS Early and Elementary Education Program is working with nine inner-city elementary schools to implement and evaluate the effects of Success for All and its components on student achievement. The five-year evaluation at Abbottston Elementary began in 1987, so students are now in the third year of the program.

A five-year evaluation with funding help from the France-Merrick Foundation began at City Springs Elementary School in Baltimore in the 1988-89 school year. This replicates the use of the full Success for All model in an inner-city elementary school that is among the poorest in the city. First-year results show improved reading achievement similar to the improvement shown at Abbottston in its first year.

Versions of Success for All that require less funding were also implemented at the beginning of the 1988-89 school year in four other Baltimore City elementary schools. These versions mainly run with fewer personnel, bringing Success for All costs down to where they can be covered using only the school's normal Chapter 1 funding.

The CDS researchers also find reading achievment effects for these schools compared to control schools. The effects are smaller than those seen at Abbottston, for two reasons: These schools have completed less than one year of implementation, and less funding means fewer one-to-one tutoring sessions for the students.

A third part of the Success for All evaluation is the study of the components of the restructuring program. In two schools evaluating the Success for All beginning reading curriculum, the researchers note, "...this component in itself increased the reading achievement of first-graders compared to control students by effect sizes of +.23 on individually administered measures and +.29 on the California Achievement Test."

Finally, implementation and evaluation of Success for All is also occurring at an inner-city elementary school in Philadelphia which serves a large population of Cambodian students. This evaluation is examining the effectiveners of Success for All in increasing the reading achievement of language minority students. Results for the first year will be reported in the next issue of the CDS Report.

References

Slavin, Robert E., Madden, Nancy A., Karweit, Nancy L., Dolan, Lawrence, and Wasik, Barbara. Success for All:

Funding Success for All

The full Success for All program concentrates "significant additional resources at the early grade levels to ensure that all children reach the third grade with adequate skills," the CDS researchers note.

The program at Abbottston is funded by the school's Chapter 1 money plus about \$400,000 in Chapter 2 funds. The program at City Springs is funded by the school's Chapter 1 money and about \$370,000 a year from a local foundation (France-Merrick). This is about \$1000 per student more than the yearly city per pupil expenditure, but it's actually less than the average state per pupil expenditure.

Yes, Success for All is designed for use by disadvantaged schools—schools that ordinarily don't have access to this kind of money.

Success for All researchers reconcile this disparity in three ways —

- (1) they argue that these schools should and can get the funding,
- (2) they are evaluating a streamlined model that can be implemented using Chapter 1 funds only, and (3) they are evaluating program components so that effective elements can be used even when the full program cannot.

First-year achievement gains for the Chaper-1-only funded sites and for the beginning reading component show that the second and third strategies are viable. Which leaves the argument that disadvantaged schools should and can get the increased funding.

"If we can show substantial and lasting gains," the researchers say, "the additional resources expended will be compensated for by significantly reduced needs for special education, remediation, and retentions throughout the grades."

This viewpoint is supported by previous economic studies that have shown how effective education could save mega-dollars in state and national social services, welfare, unemployment, and criminal justice costs, as well as boosting national productivity.

The researchers also note that "...if we can establish that all inner-city children can learn with adequate resources and effective programs, additional sources of funds may be forthcoming to provide these resources and programs."

Effects of variations in duration and resources of a schoolwide elementary restructuring program. Baltimore MD: Center for Research on Effective Schooling for Disadvantaged Students, The Johns Hopkins University, Report No. 2, February 1990. (\$5.00).

The results of the first year of implementation of Success for All at

Abbottson Elementary are also available.

Madden, Nancy A., Slavin, Robert E., Karweit, Nancy L., and Livermon, Barbara J. Restructuring the urban elementary school. *Educational Leadership*, Volume 46, Number 5, February 1989. (No cost for one reprint.)

Success for All: The Research-Based Program Elements

Success for All is a philosophy backed up by research-based instructional programs. The philosophy is one that is often stated but less often acted upon — all children can learn.

From this philosophy comes a schoolwide commitment that all children will learn — not some, not many, not most, but all. And Success for All then puts this commitment into operational terms: By the end of third grade, all children will be performing on grade level in the basic skills of reading, language, and mathematics. By the end of third grade, all children will have the foundation of basic skills necessary for success in later grades and in later life.

Meeting this commitment requires a school program with many elements. It must stress prevention of learning problems by engaging parents in support of school success and by using the best available classroom instruction. It must stress intensive and immediate interventions to correct learning problems when they first appear and are small enough to do something about.

The elements of the Success for All program address these principles. They include provision of preschool and kindergarten, a family support team, an effective reading program, reading tutors, individual academic plans based on frequent assessments, a program facilitator, training and support for teachers, and a school advisory committee.

Preschool and Kindergarten

The Success for All school provides a half-day preschool and a full-day

kindergarten, both focused on providing a balanced and developmentally appropriate learning experience for young children.

The curriculum emphasizes the development and use of language, balancing academic readiness and music, art, and movement activities. Readiness activities include use of Peabody Language Development Kits and the Story Telling and Retelling (STaR) program in which students retell stories read to them by teachers. Pre-reading activities begin in the second semester of kindergarten.

Family Support Team

Two social workers and one home liaison work full-time in the school. This team provides parenting education and works to involve parents in supporting their children's success in school. They provide family support assistance for children who are not receiving adequate sleep or nutrition,

who need glasses, who are not attending school regularly, or who have serious behavior problems.

Many studies have found that children achieve better when parents support their academic efforts. The work of the Family Support Team is directed toward encouraging and structuring that support.

Reading Program

Students in grades 1-3 are regrouped for 90-minute reading periods each day into classes of 15 students who are all at the same reading level. Thus each reading class might contain a mix of first-, second-, and third-graders, but each child would be at the same reading level.

This regrouping is a form of the Joplin Plan, which has been shown to increase reading achievement in the elementary grades.

The CDS Report is distributed at no charge. Its purpose is to provide interested educators with summaries of research results. Full reports of CDS studies, cited in the References section of each article, may be ordered from the Center at the cost indicated.

CDS is funded primarily by the Office of Educational Research and Improvement (OERI), United States Department of Education. The opinions expressed do not reflect the policy of OERI or other funding agencies, and no official endorsement should be inferred.

Commen: bout the Report and requests to be placed on the mailing list should be directed to John H. Hollifield, Editor, CDS Report, Center for Research on Effective Schooling for Disadvantaged Students, The John's Hopkins University, 3505 North Charles Street, Baltimore, Maryland 21218.

The reading program itself is based on the best available research. It focuses on making every child literate, beginning with the development of language and comprehension skills in preschool and kindergarten.

Beginning in the middle of their kindergarten year and continuing until they reach reading level 2-1, the children learn auditory discrimination, sound recognition, and sound blending, using phonetic minibooks rather than basals. They often work together in pairs, reading to one another and working on "share sheets." They read high-interest trade books in school and at home.

At the reading level 2-1, children begin a form of the Cooperative Integrated Reading and Composition (CIRC) program. They work in small teams in which they read to one another; identify characters, settings, problems, and problem solutions in narratives; summarize stories, and write.

Reading Tutors

The Success for All program includes six to ors for the 300 students in grades K-3. Each tutor works one-on-one with a total of eleven students per day.

First-graders get priority for the tutoring, however, on the assumption that the primary function of the tutors is to help all students be successful in

reading when they first begin — success which would negate the need for tutors in subsequent grades.

The tutors are certified, experienced teachers. They work one-on-one with children who are having trouble keeping up in their regular reading groups. The tutoring is conducted in 20-minute sessions taken out of an hour-long social studies period and addresses the objectives being covered in the regular reading curriculum.

During the 90-minute reading periods, the tutors serve as additional regular reading teachers. They coordinate their tutoring activities with the activities of the regular reading teachers through the use of specific information forms and scheduled meetings.

Individual Academic Plans

Every eight weeks, based on assessment of progress by the reading teachers, Individual Academic Plans are developed for each student to determine who is to receive tutoring, to suggest other adaptations in a child's program, and to identify children who may need special assistance, such as family intervention or screening for vision or hearing.

Program Facilitator

A Program Facilitator works at the school full time to coordinate the operation of Success for All. The

Facilitator works with the principal to plan and schedule the program, and visits classrooms and tutoring sessions frequently to help with individual problems.

The Facilitator works with individual children when needed to find strategies for helping them, helps teachers and tutors deal with behavior problems, and coordinates the activities of the Family Support Team with those of the instructional staff.

Teacher Training

The teachers and tutors are regular Baltimore City teachers. They received two days of inservice at the beginning of the year and work from detailed teachers' manuals to carry out the Success for All program. Several brief inservices were provided during the year on topics such as classroom management, instructional pace, and implementation of the reading curriculum.

Advisory Committee

An advisory committee meets weekly to review the progress of the program. The committee includes the school principal, the Program Facilitator, a teacher representative, a social worker, and the Johns Hopkins research staff.

A packet is available from CDS that provides further information about the Success for All program.

Cooperative Learning for Language Minority Students

Cooperative learning has often been proposed for use with language minority students. Now researchers at the University of Santa Barbara in California are putting that proposal to the test

as part of their work in the Language Minority Program of CDS.

The Santa Barbara researchers, working with the Ysleta Independent

School District in El Paso, are developing and implementing Bilingual CIRC (Cooperative Integrated Reading and Composition). The original CIRC program has been shown to increase

student reading and writing achievement in grade levels two to six. Bilingual CIRC, according to researcher Margarita Calderón, is based on principles of first and second language acquisition, literacy development for language minority students, and staff development programs for bilingual settings.

The Bilingual CIRC program consists of three main elements: basal-related or literature-related activities; direct instruction in reading comprehension; and integrated language arts, reading, and writing.

Students work in heterogeneous learning teams in all these activities, and all activities follow a regular cycle of teacher presentation, team practice, independent practice, peer preassessment, additional practice, and testing.

The CIRC process allows teachers to "keep track of their English, Spanish, and transitional readers in an efficient and effective manner," says Calderón. Students are engaged in meaningful and challenging activities at all times, and time on reading increases greatly.

Calderón notes that "curriculum and instructional adaptation have been the biggest drawbacks for teachers of language minority students" in using cooperative learning strategies. The Ysleta project has adapted the CIRC process to the Macmillan Transitional Reading Series by merging the basal reader's activities with CIRC strategies and by developing "treasure hunts" — question and answer activities — for each of the stories contained in the basal.

Treasure hunts are also being developed for the most widely used

children's literature in Spanish and English at each grade level.

To promote instructional adaptation, the project is conducting extensive staff development and training and monitoring the use of cooperative learning through five stages of implementation—the progression of teachers and students through student social skill development, teaching strategies, monitoring and feedback, grading and evaluating, and quality of interaction.

Reference

Calderón, Margarita. Cooperative Learning for Limited English Proficient Students. Baltimore MD: Center for Research on Effective Schooling for Disadvantaged Students, The Johns Hopkins University, Report No. 3. March 1990 (\$3.00).

Racing Against Catastrophe

By the year 2020, about half of the students in American schools will, under current definitions, be educationally disadvantaged.

Populations of traditionally educationally disadvantaged children — children who are African American or Hispanic, who are poor, who live in single- or no-parent homes, who live with mothers who have not completed high school, and who have a primary language other than English — will make up an ever increasing portion of American schoolchildren.

Of course, not all children in these groupings are educationally disadvantaged, but each of these measurable characteristics is associated with low levels of educational achievement.

CDS researchers Gary Natriello, Edward McDill, and Aaron Pallas document the current numbers, the projections, and the implications for schools in Schooling Disadvantaged Children: Racing Against Catastrophe. They also review educational and social programs designed to address the needs of disadvantaged students from preschool through secondary school, how new information can be developed to help schools work with disadvantaged students, and how schools can be restructured to meet the needs of disadvantaged students.

The Current and Future Outlook

Natriello, McDill, and Pallas review the different perspectives on disadvantaged students that have been popular over the last 35 years. They then describe the current conditions of the educationally disadvantaged and prospects for the future.

Based on current and projected data from the U.S. Bureau of the Census, the researchers show that:

- In 1988, Hispanics comprised nearly 11 percent of the 0-17 year olds; by 2020, the projection is 28 percent;
- In 1988, African Americans comprised 15 percent of the 0-i7 year olds; by 2020, the projection is 16 percent;
- From 1987 to 2020, the number of children living in poverty is expected to increase from 12.4 million to 16.5 million;

- From 1987 to 2020, the number of children not living with both parents will increase from 16.9 to 19.9 million;
- From 1987 to 2020, the number of children living with mothers who have not completed high school is expected to increase from 12.7 to 17.9 million; and
- From 1986 to 2020, the number of children speaking a primary language other than English is expected to increase from about 2.3 million to about 5.5 million.

Educational and Social Programs

The researchers review educational and social programs from preschool through secondary school that have been designed and implemented to address the problems of the disadvantaged. They note that "the practices assembled into specific programs offer a wealth of ideas about the ways to respond to the needs of disadvantaged youth."

This is particularly true in the preschool and elementary areas. First, evidence abounds that promoting the health care of disadvantaged mothers and their children can positively affect a variety of children's educational outcomes, including IQ, school attendance, and academic performance.

Second, twenty-five years worth of evidence exists that well-designed and carefully implemented preschool programs have measurable short-term effects on cognitive variables and significant long-term effects on affective outcomes such as self-esteem and achievement values.

Third, a growing body of research indicates that effective practices and programs are available at the clementary level in many categories:

continuous progress, cooperative learning, individualized instruction, tutoring, diagnostic-prescriptive, and computer-assisted instruction.

In short, from pre-natal care through elementary school, the research base exists for providing effective education to disadvantaged students. What doesn't yet and is the will and capability to implement our research-based knowledge and programs throughout our schools.

Secondary School Programs

The researchers note that as they move from examining preschool to elementary to secondary programs, the research base on the effectiveness of programs becomes "increasingly weaker." At the secondary level, they note, "most programs have r.ot been systematically evaluated."

Natriello, McDill, and Pallas investigate programs at the secondary level to enhance the educational achievement and attainment of disadvantaged students under four broad categories: those that provide opportunities for academic success, those that provide positive social relationships, those that enhance the relevance of school to students' future lives, and those that mitigate the negative effects of personal problems brought on by conditions and factors outside the school.

The programs they examine that represent these four categories include the Summer Training and Employment Program, Upward Bound, Middle College High School (an alternative school), the Job Corps, the Boston Compact, I Have a Dream, the Chicago Area Project, 2nd the New York City Dropout Prevention Initiative.

Overall, evaluations of the effects of these programs do not find the consistently positive effects that were found for preschool and elementary programs, either because the evaulations have problems with their methodology, or the programs are having trouble with implementation, or the programs affect some outcomes but not others.

Given these caveats, Natriello, McDill, and Pallas find most of the programs to be promising and worth further refinement and study. Also, they view the programmatic approaches

The researchers examine three sets of new directions that schools and policy makers can take to improve the education of disadvantaged students—the development of stronger data on the actual school experiences of disadvantaged youth, restructuring schools so they are more responsive to all students and disadvantaged students in particular, and the development of a strong federal policy to support "the new three R's—resources, restructuring, and research."

as providing "information needed to develop solutions to the educational problems of disadvantaged youth and insights to guide the development of a comprehensive strategy for more effectively meeting the challenge they present to schools."

New Directions

The researchers examine three sets of new directions that schools and policy makers can take to improve the education of disadvantaged students—the development of stronger data on the actual school experiences of disadvantaged youth, restructuring schools so they are more responsive to all students and disadvantaged students in particular, and the development of a strong federal policy to support "the new three R's—resources, restructuring, and research."

An army may travel on its stomach, but educational improvement has to

travel on an information base. In order to be responsive to students, the researchers note, "each level of the educational system must have the capacity to collect systematic data on students and their needs." They suggest strategies for effective collection and use of such data at the national, state, district, school, and classroom levels.

The approach to restructuring suggested by the researchers begins with defining the needs of students, especially disadvantaged students, and asking what changes in the formal organizational properties of schools to better meet those needs will lead to improved learning.

They propose seven strategies for restructuring which, they note, are "all designed to enhance the certainty with which schools develop and deliver educational resources to students, particularly disadvantaged students."

Throwing more money at the schools is never an answer, but providing more money to be used effectively is one answer. The researchers argue for greater federal resources devoted to programs that serve educationally disadvantaged children and to research and development of new and more cost-effective strategies.

"We need both more resources and more effective ways of using those resources," the researchers conclude.

Reference

Natrictlo, Gary, McDill, Edward L., and Pallas, Aaron M. Schooling Disadvantaged Children: Racing Against Catastrophe. New York: Teachers College Press, 1990. (\$17.95 paper; \$40.95 cloth). Order from Teachers College Press, P. O. Box 2032, Colchester VT 05449. (800-445-6638).

The Johns Hopkins University

CDS

Center for Research on Effective Schooling for Disadvantaged Students 3505 N. Charles Street, Baltimore, MD 21218 (301) 338-7570 Non-profit Org. U.S. Postage PAID Baltimore, MD Permit No. 1235